

In the Claims:

Add new claims 60-74 as follows:

60. (New) A method of processing signals in a communication circuit, comprising the steps of:
receiving a plurality of signals from a plurality of receive antennas;
producing a channel estimate in response to a predetermined signal of the plurality of signals; and
multiplying the plurality of signals by the channel estimate and a matrix.
61. (New) A method as in claim 60, comprising the step of despreading the plurality of signals in response to a code.
62. (New) A method as in claim 60, comprising the step of removing interference from the plurality of signals.
63. (New) A method as in claim 60, comprising the steps in any order of:
selecting the matrix from a finite set of matrices;
identifying the selected matrix to a remote receiver; and
calculating a product of the channel estimate and the selected matrix prior to the step of multiplying.
64. (New) A method as in claim 60, comprising the steps in any order of:
converting a group of the plurality of signals to serial signals;
demodulating the serial signals;
deinterleaving the serial signals; and
decoding the serial signals.
65. (New) A method as in claim 60, wherein the predetermined signal comprises at least one pilot symbol.

66. (New) A method as in claim 60, wherein the matrix is a linear basis transformation matrix.
67. (New) A method as in claim 60, comprising the step of receiving the plurality of signals from a plurality of remote transmit antennas, wherein the plurality of signals are encoded differently for each respective antenna of the plurality of transmit antennas.
68. (New) A method of processing signals in a communication circuit, comprising the steps of:
receiving a plurality of signals;
modulating the plurality of signals;
multiplying the plurality of signals by a matrix; and
transmitting the plurality of signals from a plurality of transmit antennas.
69. (New) A method as in claim 68, comprising the step of spreading the plurality of signals in response to a code.
70. (New) A method as in claim 68, comprising the step of selecting the matrix from a finite set of matrices in response to a signal from a remote transmitter.
71. (New) A method as in claim 68, comprising the steps in any order of:
encoding the plurality of signals;
interleaving the plurality signals; and
converting the plurality of signals to serial signals.
72. (New) A method as in claim 68, comprising the step of transmitting a predetermined signal to a remote receiver on a channel different from a channel of the plurality of signals.
73. (New) A method as in claim 68, wherein the matrix is a linear basis transformation matrix.